

BS 6622 XLPE/PVC Medium Voltage 19/33 (36)kV Cable



APPLICATION

Power cables for power networks, underground and in cable ducting.

CHARACTERISTICS

Voltage Rating U_0/U (Um)

19/33 (36)kV

Temperature Rating

Fixed: 0°C to +90°C

Initial temperature at S.C.C for metallic screen: 80°C

Maximum conductor temperature during S.C: 250°C

Minimum Bending Radius

Fixed: 15 x overall diameter

STANDARDS

IEC 60502-2, EN 60228

Low Smoke Zero Halogen to: IEC 60754-1 /2, IEC 61034-2

Flame Retardant: IEC 60332-3-24 Cat C, IEC 60332-1-2

UV Resistant: ISO 4892-3

Abrasion and Tear Resistant: EN 60229-4.1

Impact rated to: AG2 EN 60364-5.51

THE CABLE TEST

We have world-class testing facility, and made rigorous testing regime, every meter of cable before leaving the factory must go through strict testing, testing qualified products will be shipped to customers, effectively ensure product quality and meet customer requirements.

SUSTAINABILITY COMMITMENT

Guowang Cable actively implements the "carbon reduction" goal, strives to promote the green's low-carbon transformation, strengthens energy-saving and emission reduction technology innovation, and promotes the company's healthy and sustainable development.

CONSTRUCTION

Conductor

Class 2 Stranded Copper Conductor

Conductor Screen

Semi-conductive XLPE(Cross-Linked Polyethylene)

Insulation

XLPE (Cross-Linked Polyethylene)

Insulation Screen

Semi-conductive XLPE(Cross-Linked Polyethylene)

Metallic Screen

Individual or collective overall copper tape screen

Filler

PET (Polyethylene Terephthalate) fibres

Separator

Binding Tape

Bedding

PVC (Polyvinyl Chloride)

Armour

Single core: AWA (Aluminium Wire Armoured)

Multi-core: SWA (Steel Wire Armoured)

Sheath

PVC (Polyvinyl Chloride)

Sheath Colour

● Black

DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA	NOMINAL INSULATION THICKNESS	NOMINAL OUTER SHEATH THICKNESS	NOMINAL OVERALL DIAMETER	NOMINAL WEIGHT
	mm2	mm	mm	mm	kg/km
1	70	8	2.2	38.80	2077
1	95	8	2.3	40.30	2393
1	120	8	2.3	41.70	2692
1	150	8	2.4	44.70	3193
1	185	8	2.5	46.40	3623
1	240	8	2.6	49.00	4309
1	300	8	2.6	51.60	4999
1	400	8	2.7	54.40	5956
1	500	8	2.8	58.00	7107
1	630	8	3	63.30	8783
1	800	8	3.1	67.6	10766
3	70	8	3.5	77.6	9625
3	95	8	3.7	81	10827
3	120	8	3.8	84.4	12043
3	150	8	3.9	88.1	13379
3	185	8	4	91.5	14800
3	240	8	4.2	97.1	17324
3	300	8	4.3	102.7	19777
3	400	8	4.6	109.1	23228

ELECTRICAL CHARACTERISTICS

Single Core Cable

NOMINAL CROSS SECTIONAL AREA	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C	MAXIMUM CONDUCTOR AC RESISTANCE AT OPERATING TEMP. AND 50 HZ	CAPACITANCE	CHARGING CURRENT	DIELECTRIC LOSSES	REACTANCE AT 50HZ	CONDUCTOR S.C.C FOR 1SEC	CURRENT RATING A	
mm2	Ω/km	Ω/km	uF/km	A/Km	W/Km	ohms/km	KA	Laid in ground	Laid in free air
70	0.268	0.324	0.159	0.947	72	0.146	10.02	275	308
95	0.193	0.2465	0.171	1.022	77.64	0.141	13.59	326	369
120	0.153	0.1957	0.184	1.101	83.67	0.135	17.17	368	421
150	0.124	0.1589	0.199	1.191	90.51	0.132	21.46	406	470
185	0.0991	0.1273	0.213	1.275	96.88	0.128	26.47	440	528
240	0.0754	0.0975	0.2	1.41	107.03	0.122	34.34	496	608
300	0.0601	0.0784	0.258	1.541	117.11	0.118	42.93	545	679
400	0.047	0.0623	0.282	1.684	127.99	0.113	57.23	597	758
500	0.0366	0.0498	0.313	1.87	142.16	0.109	71.54	650	844
630	0.0283	0.0401	0.356	2.127	161.68	0.106	90.14	699	931
800	0.0221	0.0332	0.394	2.35	178.65	0.102	114.47	744	1013

Multi Core Cable

NOMINAL CROSS SECTIONAL AREA	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C	MAXIMUM CONDUCTOR AC RESISTANCE AT OPERATING TEMP. AND 50 HZ	CAPACITANCE	CHARGING CURRENT	DIELECTRIC LOSSES	REACTANCE AT 50HZ	CONDUCTOR S.C.C FOR 1SEC	CURRENT RATING A	
mm2	ohms/km	ohms/km	uF/km	A/Km	W/Km	ohms/km	kA	Laid in ground	Laid in free air
70	0.268	0.3241	0.19	0.947	72.00	0.128	10.02	264	281
95	0.193	0.2466	0.205	1.022	77.64	0.123	13.59	312	336
120	0.153	0.1958	0.221	1.101	83.67	0.118	17.17	354	383
150	0.124	0.1591	0.239	1.191	90.51	0.114	21.46	395	432
185	0.0991	0.1276	0.256	1.275	96.88	0.110	26.47	443	489
240	0.0754	0.0979	0.283	1.408	107.03	0.106	34.34	507	567
300	0.0601	0.079	0.31	1.541	117.11	0.102	42.93	567	641
400	0.047	0.063	0.338	1.684	127.99	0.098	57.23	633	724

DE-RATING FACTORS

AIR TEMPERATURE °C	25	30	35	40	45	50	55
DE-RATING FACTOR	1.00	0.96	0.92	0.88	0.83	0.78	0.73
GROUND TEMPERATURE °C	10	15	20	25	30	35	40
DE-RATING FACTOR	1.03	1.00	0.97	0.93	0.89	0.86	0.82
GROUND THERMAL RESISTIVITY km/W	0.9	1.0	1.2	1.5	2.0	2.5	3.0
DE-RATING FACTOR	1.06	1.04	1.00	0.92	0.82	0.74	0.68
DEPTH OF LAYING m	0.80	1.00	1.25	1.50	1.75	2.00	2.50
DE-RATING FACTOR	1.00	0.97	0.95	0.94	0.93	0.91	0.90

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.